



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,609	07/16/2003	Kurt Plotz	032745-037	6540

7590            06/20/2007  
BURNS, DOANE, SWECKER & MATHIS, L.L.P.  
P.O. Box 1404  
Alexandria, VA 22313-1404

EXAMINER
----------

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT	PAPER NUMBER
----------	--------------

1771

MAIL DATE	DELIVERY MODE
-----------	---------------

06/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/619,609	PLOTZ, KURT	
	<b>Examiner</b>	<b>Art Unit</b>	
	Norca L. Torres-Velazquez	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 April 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-11,13-16 and 32-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3-11,13-16 and 32-34 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. 09/619,529.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102/103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 4, 9-10, 13 and 15-16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over GREISER et al. (US 5,017,426) as stated in previous office action.

GREISER et al. teaches a laminate “suitable as a carrier web for roofing and sealing sheets that comprises a preconsolidated synthetic fiber web and preconsolidated mineral fiber web which are bonded to each other by needling.” (Column 1, lines 48-52) Greiser teaches that “[p]referred mineral fiber webs are glass fiber webs...” See column 1, line 66. These “roofing and sealing sheets are usually coated with bitumen on one or both sides, but can also have a coating made from elastomers or plastomers,” thus meeting the claimed requirement for one or more layers coated on a glass fiber side of the carrier web. See column 1, lines 10-15. The reference teaches that the synthetic fiber web preferably comprises polyester fibers. (Col. 1, lines 53-54)

The reference further teaches that the needling is carried out in such a way that the needles first enter the synthetic fiber web and then penetrate through the material fiber web underneath and teaches pulling the synthetic fibers through the mineral fiber web. The needling should comprise 10 to 100 stitches/cm<sup>2</sup>, preferably between 20 and 50 stitches/cm<sup>2</sup>. (Col. 2, lines 13-22). It is reasonable to presume that “part of the organic synthetic fibers penetrate through the fiberglass mat and lie adjacent to a side of the fiberglass containing mat that is

opposite to the organic nonwoven mat" as recited in claim 1 is inherent to the invention of GREISER et al. since it uses a similar needling method to that used to produce the present invention. The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of having the organic fiber penetrate through the fiberglass mat and lie adjacent to a side of the fiberglass-containing mat would obviously have been present once the GREISER et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

***Claim Rejections - 35 USC § 103***

3. Claims 5-8, 11, 14 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over GREISER et al. as applied above, and further in view of HEIDEL et al. (US 5,171,629) as stated in previous office action.

HEIDEL et al. discloses a carrier web for roofing and sealing webs that consists of a glass fiber mat and a mat of synthetic fibers which are needled to one another and end-consolidated with a polymer-free low-formaldehyde melamine-formaldehyde precondensate. The glass fiber mat can be preconsolidated using polymer binders or melamine resins. (Col. 2, lines 13-17) The synthetic fiber nonwoven can be built up from staple fibers or from continuous fibers. Examples of synthetic fibers suitable are aliphatic and aromatic polyamides, polyacrylonitrile and in particular polyester fibers. The reference teaches pre-consolidation of the synthetic fiber nonwoven by a calendering process. (Refer to Col. 2, lines 25-49)

Since both references are directed to carrier webs for roofing and sealing webs, the purpose disclosed by HEIDEL et al. would have been recognized in the pertinent art of GREISER et al.

Art Unit: 1771

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the organic synthetic fibers mat and the fiberglass containing mat and provide them with alternative preconsolidation processes and the different embodiments (i.e. staple fiber or filamentous nonwoven synthetic fibers mat) with the motivation of producing a carrier web with high mechanical stability, including at elevated temperatures, that is combined with very good burning properties as disclosed by HEIDEL et al. (Col. 2, lines 3-8)

4. Claims 3 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over GREISER et al. as applied above, and further in view of NIEMINEM et al. (US 5,458,960) as stated in previous office action.

NIEMINEM et al. relates to a flexible base web for construction covering (i.e. floor or wall covering). (Refer to Col. 1, lines 4-16) The web has a main layer that comprises mainly of mineral also includes a surface layer of polyethylene, polypropylene or polyester fibers bonded to the main layer by needling. (Col. 8, lines 5-10)

GREISER et al. discloses the claimed invention except that it uses polyester fibers instead of polypropylene fibers, NIEMINEM et al. shows that polypropylene fiber is an equivalent structure known in the art. Therefore, because these two synthetic fibers were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute polyester for polypropylene.

With regards to claim 32, NIEMINEM et al. teaches the use of polyvinyl chloride coating to protect the covering material from weather conditions. Since both references are directed to similar applications (wall and floor coverings), the purpose disclosed by NIEMINEM et al. would have been recognized in the pertinent art of GREISER et al.

Art Unit: 1771

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the carrier web of GREISER et al. and provide it with a coating with the motivation of providing the material with good weather resistance and processability, as well as fire resisting properties when a chlorinated coating is used as disclosed by NIEMINEM et al. (Col. 6, lines 56-61)

5. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over GREISER et al. in view of HEIDEL et al. (US 5,171,629) as stated above and further in view of FRANKENBURG et al. (US 4,569,088) as stated in previous office action.

GREISER et al. and HEIDEL et al. disclose the claimed invention except for using mechanical needling instead of hydraulic needling, FRANKENBURG et al. shows that hydraulic needling is an equivalent process known in the art. Therefore, because these two types of needling were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute the mechanical needling of GREISER et al. and HEIDEL et al. for the hydraulic needling of FRANKENBURG et al.

#### *Response to Arguments*

6. Applicant's arguments filed April 25, 2007 have been fully considered but they are not persuasive.

a. Applicants argue that the primary reference of GREISER (US 5,017,426) does not disclose or suggest that *organic fibers penetrate through said fiberglass mat and lie adjacent to a side of said fiberglass containing mat that is opposite to said organic non-woven mat*, as claimed in the present invention. Moreover, there is no basis to "presume"

that Greiser's fibers lie adjacent to mineral fiber web merely because the synthetic fibers are "pulled through" the mineral fiber web.

GREISER teaches (Column 2, lines 13-22):

The needling should comprise 10 to 100 stitches/cm<sup>2</sup>, preferably between 20 and 50 stitches/cm<sup>2</sup>, preferably between 20 and 50 stitches/cm<sup>2</sup>. This needling is carried out in such a way that the needles first enter the synthetic fiber web and then penetrate through the material fiber web underneath. The depth of a stitch naturally depends on the thickness of the webs. It is between 6 and 11 mm and leads to a strong positive join of the synthetic fiber web to the mineral fiber web by means of synthetic fibers pulled through the latter. (Col. 2, lines 13-22).

It is the Examiner's position that Greiser describes or suggest that fibers pulled through the mineral fiber web will lie adjacent to a side of said containing mat. The Examiner provides herein the teachings of a related application 09/615,535 now US 7,199,65 B1 to GROH et al. as evidence to further support her position and further in accordance to the Board of Patent Appeals and Interferences' decision of July 28, 2006. GROH et al. needles the synthetic and mineral fiber webs at 32 stitches/cm<sup>2</sup>, which is within the preferred stitch range taught in Greiser, is said to provide the claimed penetration characteristics. Thus, absent any evidence to the contrary, it is reasonable to infer that Greiser necessarily describes "part of said organic synthetic fibers penetrate through said fiberglass mat and lie adjacent to a side of said fiberglass containing mat that is opposite to said organic non-woven mat" as claimed in the present invention.

**7. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 1771

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-5:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Norca L. Torres-Velazquez/  
Norca L. Torres-Velazquez  
Primary Examiner  
Art Unit 1771

June 11, 2007